053/0532

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
IDAHO OPERATIONS OFFICE
950 West Bannock Street, Suite 900
Boise, Idaho 83702

November 15, 2012

Mr. Marko Adzic
Teck America Incorporated
501 N Riverpoint Blvd., Suite 300
PO Box 3087
Spokane, WA 99220-3087

Re: LOE to Sample Bossburg Flats Area and Young American Mill Site

Dear Mr. Adzic,

This letter outlines the expected content of a data collection effort to evaluate human health and ecological risks associated with contaminants near the town of Evans, Washington. The U.S. Environmental Protection Agency, Region 10 has identified a need for further investigation of two areas within the Upper Columbia River Site, the Young America Mill Site and the Bossburg Flat area, to determine whether contamination at those locations may be sources of contamination to the Upper Columbia River Site.

Young America Mill Site

The Washington State Department of Ecology notified the EPA of a potential hazardous waste site at the former Young America Mill site in June, 2011. The mill site is located approximately 4.2 miles north of Evans, Washington on State Highway 25 and included dilapidated mill buildings and a tailings impoundment. The EPA conducted a Removal Assessment during the summer of 2011 and found soil contamination associated with the former milling operation. The EPA found metal contaminated soils around the tailings impoundment and around three old mill buildings west of the Highway 25, on the bench above the Upper Columbia River.

The EPA's removal action to address the former tailings impoundment and the old mill buildings west of Highway 25 was completed on November 3rd. At this time, EPA is not requiring Teck to conduct any additional assessment of this area. Further characterization from the mill site to the river is needed to determine:

1) If inorganic contaminants of concern, such as lead, are present at concentrations that pose a risk to human health or the environment.
2) Establish whether past releases of tailings have contaminated the river/reservoir sediments in the immediate vicinity of the former tailings impoundment.
3) Determine horizontal and vertical extent of soil contamination directly associated with the historic discharge point of tailings impoundment decant water at the current shoreline below the mill operations.

4) Establish whether the contamination observed downstream at the historic Bossburg town site day use area may be affected directly by Young American milling operation discharges and if so to what degree.

Bossburg Flat

Teck discovered high concentrations of lead on Bossburg Beach during the Remedial Investigation / Feasibility beach sampling program. Bossburg Beach is approximately a quarter mile south of the Young American Mill Site. The Bossburg Flats area is immediately upland of the beach. The EPA performed field screening for a Removal Assessment at Bossburg Flat in August, 2011. The Removal Assessment was performed to further assess if inorganic contaminants of concern, such as lead, are present at concentrations that pose a risk to human health or the environment. The levels of lead measured in the beach by Teck, and measured in the flat above the beach by the EPA exceed human health screening values.

The EPA provided the National Park Service (NPS) this information in December of 2011. The NPS staff conducted a screening level survey to determine the approximate area of contamination, and then erected temporary barriers and signs closing the area of concern. The source of the soil contamination in this area is unknown. According to historical records provided by the NPS, a cable ferry used to cross the river at Bossburg Flat and remnants of old structures possibly associated with the cable ferry were observed in a portion of the contaminated area. These historical records also indicated a railroad spur associated with the ferry on the east side of the river. Further characterization is required to determine:

1) The horizontal and vertical extent of soil contamination in the upland area of Bossburg Flat;
2) The horizontal and vertical extent of soil contamination in the bank between the Bossburg Flat Beach and the upland area above it;
3) Whether complete transport pathways exist to carry contamination from the upland area or the bank to the river/reservoir;
4) The extent of sediment contamination in the adjacent river/reservoir. High levels of lead were found in composite samples from the beach, but it is unclear how far downstream this contamination extends. Sampling to assess the extent of contamination should extend downriver to the Evans Campground area where lead also exceeds the EPA's screening level of 400 parts per million.
5) The nature and horizontal and vertical extent of any contamination on the west bank of the river, in and around the area of the former cable ferry landing.

The 2006 Settlement Agreement signed by Teck requires Teck to define sources of contamination. The final approved RI/FS Work Plan states:

> To minimize the potential for recontamination following the remedial action, ongoing contaminant sources will need to be identified and controlled, to the extent practicable. During the remedial investigation, sediment and water data will be collected to better understand potential sources to the UCR.

Consistent with the Settlement Agreement and Final RI/FS Work Plan, Teck is hereby required to conduct source control evaluations at Bossburg Flat area and river/reservoir sediments below the tailings impoundment discharge point at the Young America Mill Site. The source control evaluations may use existing documents, site visits, field screening tools such as a field portable X-ray fluorescence (XRF) analyzer, and/or sampling with laboratory analysis. Any XRF analyses must be confirmed with analytical chemistry in a portion of the samples. The goal of the source control evaluations is simply to determine local extent and whether these upland sites pose unacceptable ongoing risk to the overall Upper Columbia River Site and to document the findings.

A Sampling and Analysis Plan that includes a Field Sampling Plan and a Quality Assurance Project Plan (QAPP) must be submitted prior to doing field work. EPA's review and approval of the plan is required before work can begin, and Teck will need to obtain access agreements from landowners and any necessary permits prior to sampling. Areas where sediment or soil sample collection is planned must be cleared by the Cultural Resources Working Group.

Samples must be collected from the river/reservoir sediments immediately below the former Young America Mill Site tailings impoundment discharge and from the beach and river/reservoir sediments below Bossburg Flat. The sampling plan should include a protocol for successfully sampling sediment from onshore and near shore locations. (Be aware samplers may have to work around a surface layer of cobble.) The samples must be discrete and not area composites, in order to effectively track localized patterns of contamination. Samples must be analyzed for TAL metals. Any proposed testing for toxicity must be consistent with the procedures outlined in the pending Upper Columbia River Phase 2 Sediment Quality Assurance Project Plan (QAPP) prepared for the site wide RI/FS.

Several background documents are enclosed, including the EPA's Removal Assessment Reports, the results of the XRF evaluation conducted by NPS staff at Bossburg Flat, and other historic information obtained by the EPA.

A draft source control evaluation field sampling plan must be provided to the EPA within 30 days of receipt of this letter. If questions arise as you develop the work plan please contact me at 208/378-5760.

Sincerely,

R Matthew Wilkening

R. Matthew Wilkening
Project Manager

Enclosures:

Bossburg Flat Removal Assessment Trip Report
Young America Mine Removal Assessment Trip Report
CH2M Hill Technical Memorandum: Screening Evaluation of XRF Soil Observations
NPS XRF survey of Bossburg Flat
Bossburg 1936 map
Bossburg – A Brief History

Cc: